

AMENDMENTS TO THE CLAIMS:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1. **(Currently Amended)** A device for controlling fluid using surface tension of the fluid, comprising:

at least one storage chamber to which a fluid is injected and stored;

at least one reaction chamber in which a predetermined reaction occurs on the fluid;

at least one supply channel, each supply channel communicating fluid from each storage chamber to the at least one reaction chamber;

at least one exhaust chamber in which fluid used as a result of the reaction is exhausted;

at least one exhaust channel, each exhaust channel communicating used fluid from each reaction chamber to the at least one exhaust chamber;

a first capillary stop valve located in each supply channel between the at least one storage chamber and the at least one reaction chamber;

a second capillary stop valve located in each exhaust channel between the at least one reaction chamber and the at least one exhaust chamber;

at least one side connecting channel ~~which connects~~connecting the first capillary stop valve to the second stop valve, wherein the capillary stop valves stop the flow of the fluid in each supply channel and exhaust channel using the surface tension of the fluid, and wherein a flow of fluid ~~the flow~~ through the side connecting channel opens the capillary stop valves;

at least one flow delay part formed within said side connecting channel and delays flow of the fluid by the surface tension of the fluid; and

wherein said fluid moves from said storage chamber to said reaction chamber and exhaust chamber ~~by means of~~using only surface tension and ~~a different fluid replaces the fluid in~~ said reaction chamber is replaced by a different fluid.

2. (Previously Presented) The device as claimed in claim 1, wherein said at least one storage chamber includes a fluid inlet operable to receive the fluid.

3. (Previously Presented) The device as claimed in claim 1, wherein said at least one side connecting channel adjusts the surface tension by at least one of increasing a width of the path, decreasing a width of the path, and performing surface modification or temperature change so that the fluid reliably moves.

4. **(Currently Amended)** The device as claimed in claim 1, wherein said capillary stop valves adjust the surface tension by at least one of a hydrophilic or hydrophobic property on a channel surface of the valve, deforming the channel geometry, and changing a temperature of the channel surface of the valve.

5. **(Currently Amended)** The device as claimed in claim 1, wherein said at least one flow delay part adjusts the surface tension by at least one of a hydrophilic or hydrophobic property on a channel surface of the capillary stop valve side connecting channel, deforming the channel geometry, and changing a temperature of the channel surface of the capillary valve side connecting channel.

6. (Previously Presented) The device as claimed in claim 1, wherein said at least one exhaust chamber includes a structure that smoothes the flow of the fluid by increasing the surface tension, making a preceding portion of the fluid uniform when the fluid flows, thereby preventing fine air bubbles from occurring.

7. (Previously Presented) The device as claimed in claim 1, wherein said at least one side connecting channel includes an isolation threshold preventing reactants among a plurality of said reaction chambers from diffusing.

8. (Previously Presented) The device as claimed in claim 1, wherein said at least one

reaction chamber comprises at least one electrode on a wall of the reaction chamber, the electrode configured for optical and electrochemical detection.

9. (Previously Presented) A device for controlling fluid using surface tension of the fluid, comprising:

at least two devices according to claim 1 connected in series.

10. (Previously Presented) A device for controlling fluid using surface tension of the fluid, comprising:

at least two devices according to claim 1 connected in parallel.

11. (Previously Presented) The device of claim 1, further comprising a filter.

12. (Previously Presented) The device of claim 1, further comprising at least one sample preparation chamber.

13. (Previously Presented) The device of claim 1, further comprising at least one air vent.

14. (Previously Presented) A drug delivery device comprising the device of claim 1.

15. (Previously Presented) A biochip comprising the device of claim 1.

16. (Previously Presented) A micro biological/chemical reactor comprising the device of claim 1.

17. (Canceled).